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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,342	01/23/2004	Hidehiko Asai	03500.017847.	5188

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EXAMINER

DHINGRA, PAWANDEEP

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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10/05/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,342	Applicant(s) ASAI, HIDEHIKO	
	Examiner PAWANDEEP S. DHINGRA	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/5/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 15, 17-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 15, 17-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- This action is responsive to the following communication: Amendment after non-final action filed on 8/5/2010.
- Claims 12, 15, 17-19 and 21 are pending.

Response to Arguments

Applicant's amendments, filed 8/5/2010 have been entered and fully considered. However, applicant's arguments filed 8/5/2010 have been fully considered but they are not persuasive.

Applicant argues that Yoshida fails to disclose accept from a user, a number of data arranged in the first direction independently of a number of the data arranged in the second direction.

In reply, examiner asserts that Yoshida discloses a first accepting unit (final controlling element 120, drawing 8, note that element 120 has a user interface with a ten key and a set key) configured to accept a number of the data arranged in the first direction independently of a number of the data arranged in the second direction based on a user instruction (see abstract, paragraphs 70-71, 75, 97, note that instead of printing four identical images (two images in vertical direction and two images in horizontal direction as shown in drawing 14) on one A4 size sheet of paper, system (CPU 122, which controls the whole system) can be made to print two or three identical images based on a user's instruction on one A4 size sheet of paper). Furthermore, paragraph 97 clearly mentions that typically when data received is of A6 size and the record paper is of A4 size, four identical images are printed on one A4 size recording

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sheet. But, the system could be made to print two or three images instead of printing standard four images in first and second direction on one A4 size sheet. Thus, in order to make the system perform differently from typical processing, a user instruction of some sort has to be taking place.

Applicant argues that Funamizu fails to teach accepting a number of data arranged in a second direction independently of a number of the data arranged in a first direction based on a user instruction.

In reply, examiner asserts that Funamizu teaches a second accepting unit (see fig 44B) configured to accept a number of data arranged in a second direction (vertical) independently of a number of the data arranged in a first direction (horizontal) based on a user instruction (see figs. 32-35, 44 with text, note that user can choose the number of data to be arranged in a vertical direction and a number of data to be arranged in a horizontal direction independently of each other based on user's preference) (note that fig. 32 shows a 4 in 1 configuration wherein 2 of data are in horizontal and 1 in vertical row, while fig. 34 shows two data in each row and fig. 35 shows only 1 data in single direction). The combination of references used has been successfully shown to teach all the limitations of independent claims, see rejections below.

Claim Rejections - 35 USC § 101

Examiner has carefully considered the amendments filed by the applicant but previous 101 rejections to claims 15 and 17-19 are still valid and claims are still rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent and recent Federal Circuit decisions indicate that

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a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the claims 15 and 17-19 recite a layout method in an image forming apparatus in the preamble and a accepting unit instead of setting unit, accepting input from user, but it still does not really tie the steps of claim 15 to an apparatus, which actually performs those steps. It could be read as method written on a paper which could be placed in an image forming apparatus. Thus, the claim is not positively tied to another statutory category that accomplishes the claimed method steps, and therefore does not qualify as a statutory process. For example the image repeat function capable of performing a layout process to arrange plural data on the recording paper including steps of a first accepting step, second accepting step, selecting step and control step is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. Thus, applicant has provided no explicit and deliberate definitions of "first accepting step", "second accepting step", "selecting step" and "control step" to limit the steps to be performed and executed by a machine and the claim language itself is sufficiently broad to read on a person mentally setting the number of data arranged in first and second directions independent of each other based on user instructions, selecting a first layout mode or second layout mode and executing or sketching the layout modes on a sheet of paper.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 recites a computer-readable medium,

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but neither the claim nor the disclosure limit the medium to the statutory embodiments. Such recitation could be reasonably understood to include computer readable media that cover signals per se, which the USPTO must reject under 35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject matter. In an effort to assist the Applicant in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the examiner suggests the following approach: a claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim.

Examiner Notes

Examiner cites particular paragraphs, columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12, 15, 17-19 and 21 are rejected under 35 U.S.C. 103 as being unpatentable over Yoshida Takehiro et al., JP 2002-016812 in view of Funamizu et al. , US 5,867,279 further in view of Suzuki, US 5,289,570.

Re claim 12, Yoshida discloses an image forming apparatus (image communication device, drawing 8) which has an image repeat function (see abstract, drawings 14-15, paragraphs 92-100) capable of performing a layout process (see drawings 14-15) to arrange plural same data (see drawings 14-15, paragraphs 92-100) in a first direction (horizontal direction) and also arrange data same as the plural same data in a second direction (vertical direction) on a same face of one recording paper (see drawings 14-15, paragraphs 92-100), comprising: a first accepting unit (final controlling element 120, drawing 8, note that element 120 has a user interface with a ten key and a set key) configured to accept, from a user a number of the data arranged in the first direction independently of a number of the data arranged in the second direction (see abstract, paragraphs 70-71, 75, 97, note that instead of printing four identical images (two images in vertical direction and two images in horizontal direction as shown in drawing 14) on one A4 size sheet of paper, system (CPU 122, which controls the whole system) can be made to print two or three identical images based on a user's instruction on one A4 size sheet of paper. Further note that paragraph 97 clearly mentions that typically when data received is of A6 size and the record paper is of A4 size, four identical images are printed on one A4 size recording sheet. But, the

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system could be made to print two or three images instead of printing standard four images in first and second direction on one A4 size sheet. Thus, in order to make the system perform differently from typical processing, a user instruction of some sort has to be taking place). Yoshida further discloses a second layout mode (see drawings 14-15) being that, in the image repeat function, the mutually adjacent same data of the number accepted by said first accepting unit are arranged in the first direction without an interval (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same mutually adjacent images arranged in the first direction but there is no interval or margin between the images, see paragraphs 92-100), and also the mutually adjacent same data of the number accepted by accepting unit are arranged in the second direction without an interval (see drawings 14-15, note that there is a boundary/cut line, CL to clarify the separation between the plural same adjacent images arranged in the second direction but there is no interval or margin between the images, see paragraphs 92-100); a controller (CPU 122, drawing 8, CPU which controls the whole system) configured to execute the second layout mode in the image repeat function in a case where the second layout mode is selected (see drawings 14-15 with text).

Yoshida fails to explicitly disclose a second accepting unit configured to accept, from a user a number of data arranged in a second direction independently of a number of the data arranged in a first direction; a selecting unit configured to select a first layout mode or a second layout mode, the first layout mode being that, the mutually adjacent data are arranged in the first direction with at least one interval, and also the mutually

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adjacent data are arranged in the second direction with at least one interval, and a controller configured to execute the first layout mode in a case where the first layout mode is selected by said selecting unit, and execute the second layout mode in a case where the second layout mode is selected by said selecting unit.

However, Funamizu teaches a second accepting unit (see fig 44B) configured to accept, from a user a number of data arranged in a second direction (vertical) independently of a number of the data arranged in a first direction (horizontal) (see figs. 32-35, 44 with text, note that user can choose the number of data to be arranged in a vertical direction and a number of data to be arranged in a horizontal direction independently of each other based on user's preference) (note that fig. 32 shows a 4 in 1 configuration wherein 2 of data are in horizontal and 1 in vertical row).

Suzuki teaches a selecting unit (UI 80, fig. 5) configured to select a first layout mode (see figures 23-27 with text) or a second layout mode (see figures 19-22 with text) (see col. 4, lines 56-59, col. 20, lines 1-37) the first layout mode being that, the mutually adjacent data are arranged in the first direction (horizontal) with at least one interval, and also the mutually adjacent data are arranged in the second direction (vertical) with at least one interval (see figures 23-27 with text, note that boundary region, M has white data as margin between the mutually adjacent data (G1-G4) arranged in horizontal and vertical directions), the second layout mode being that, the mutually adjacent data are arranged in the first direction without an interval, and also the mutually adjacent data are arranged in the second direction without an interval (see figures 19-22, note that boundary region, M does not have any white data as margin between the mutually

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adjacent data (G1-G4) arranged in horizontal and vertical directions); and a controller (CPU 103, fig. 5, note that CPU controls the whole picture image editing system including editing means, boundary means, input from UI and interrupt processing routine) configured to execute the first layout mode in a case where the first layout mode is selected by said selecting unit, and executing the second layout mode in a case where the second layout mode is selected by said selecting unit (see figures 19-26 with corresponding text).

It would have been advantageous to modify the image communication device of Yoshida to include image copying techniques as taught by Funamizu and the picture image editing system and techniques as taught by Suzuki for the benefit of setting a layout for arranging number of data in horizontal and vertical directions independently of each other on a single sheet of paper based on user's preference as taught by Funamizu in figures 36-38, 44 and "forming single-page picture image data in a page memory device by editing a plurality of sets or groups of picture image data input from an input unit, and then furnishing such picture image data edited in a single page format to picture image output equipment" as taught by Suzuki at column 1, lines 5-15. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Yoshida with the apparatuses of Funamizu and Suzuki to reach the aforementioned advantage.

Re claim 15, claim 15 recites identical features, as claim 12, except claim 15 is a method claim. Thus, arguments made for claim 12 are applicable for claim 15.

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Re claim 17, Yoshida in view Funamizu further in view of Suzuki discloses wherein the image forming apparatus (Yoshida, drawing 1; Suzuki, figure 2) is capable of printing either one of image data sent from a scanner (Suzuki, element 20, figures 2, 5 with text) and image data sent from a computer (see Yoshida, paragraphs 9, 121-123, note that data can be sent from a PC to another PC and can be printed; Suzuki element 80, figs. 2, 5 with text), and said selection step enables selection of either one of the first layout mode and the second layout mode (see Suzuki, col. 4, lines 56-59, col. 20, lines 1-37; figs. 19-26 with text) in the image repeat function (see Yoshida, abstract; drawings 14-15 with text) through an operation unit (UI 80, fig. 5 of Suzuki) of the image forming apparatus (copying machine of Suzuki as a whole as shown in fig. 2) (see Suzuki, figures 2,5 with text).

Re claim 18, Yoshida in view Funamizu further in view of Suzuki discloses wherein the image forming apparatus (Yoshida, drawing 1; Suzuki, figure 2) capable of printing image data sent from a computer (see Yoshida, paragraphs 9, 121-123, note that data can be sent from a PC to another PC and can be printed; Suzuki, element 80, figures 2, 5 with text), and said selection step enables selection of either one of the first layout mode and the second layout mode (see Suzuki, col. 4, lines 56-59, col. 20, lines 1-37; figs. 19-26 with text) in the image repeat function through an operation unit (UI 80, fig. 5 of Suzuki) of the computer (see Suzuki, figures 2,5 with text; Yoshida, paragraphs 121-123).

Re claim 19, Yoshida in view Funamizu further in view of Suzuki discloses wherein said selection step enables to select either one of the first layout mode and the

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second layout mode (see Suzuki, col. 4, lines 56-59, col. 20, lines 1-37; figs. 19-26 with text) in the image repeat function through an operation unit (UI 80, fig. 5 of Suzuki) of a computer (see Suzuki, figures 2, 5 with text; Yoshida, paragraphs 121-123).

Re claim 21, claim 21 recites identical features, as claim 15, except claim 21 merely deals with executing the method of claim 15 on a computer. Thus, arguments made for claim 15 are applicable for claim 21.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAWANDEEP S. DHINGRA whose telephone number is (571)270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. D./
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625